[illegible]

[illegible] [illegible]

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[illegible]

[illegible]

[illegible]

[illegible] leukotomy [illegible] [1][illegible] Total Quality Management [illegible]

[illegible]

[illegible] Turing Test[illegible]leukotomy[illegible]AlphaGo Zero[illegible]

[illegible]

[illegible]

[illegible]Neuroscience [illegible]

[illegible] neuroscience [illegible]

[illegible] [2][illegible]

[illegible]Fight-or-flight response[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] O.J.Simpson [illegible]

[illegible] Turing Test [illegible]

[illegible]

[illegible] [3] [illegible]

[illegible]

[illegible] logical positivism [illegible] positive [illegible] positivism [illegible]

[illegible]

[illegible] positive [illegible]

[illegible]

[illegible]

[illegible] [4] [illegible]

[illegible] [5] [illegible]

[illegible]Technological Singularity [illegible]

[illegible]Karl Popper[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] BRAIN Initiative [illegible]

[illegible] [6][illegible]

[illegible] leukotomy[illegible]AlphaGo Zero[illegible]

[illegible]**Leukotomy** [illegible]

Moniz [illegible]"for his discovery of the therapeutic value of leucotomy in certain psychoses."[illegible] leukotomy [illegible] leukotomy [illegible]

[illegible]leucotomy [illegible]leucotomy [illegible] leucotomy [illegible]

Leukotomy [illegible]

1[illegible] personalities [illegible] mental diseases[illegible]

2[illegible] leukotomy [illegible] leukotomy [illegible]

3[illegible] personality [illegible] intelligence [illegible] Walter Freeman [illegible] personality [illegible] intelligence [illegible] [7][illegible]

[illegible] personality [illegible] intelligence[illegible] personalities [illegible] mental diseases[illegible] personality [illegible] intelligence [illegible] personality [illegible] intelligence [illegible]

Leukotomy [illegible] Leukotomy [illegible] SyNAPSE [illegible] Human Brain Project [illegible] BRAIN Intiative [8] [illegible]

[illegible] Turing Test [illegible] Nature [illegible] AlphaGo Zero [illegible] superhuman [illegible] superhuman [illegible] generic [illegible] human [illegible]

Leukotomy [illegible] Nature [illegible] AlphaGo Zero [illegible] superhuman [illegible] peer review [illegible] Peer review [illegible] [9] [illegible]

[illegible] AlphaGo Zero [illegible]

[illegible] AlphaGo Zero [illegible] Superhuman [illegible]

Nature [illegible] AlphaGo Zero [illegible] superhuman [illegible] performance [illegible] superhuman [illegible] generic [illegible] human [illegible] superhuman [illegible]

AlphaGo [illegible] game [illegible]

AlphaGo Zero [illegible] AlphaGo Master [illegible] superhuman [illegible] game [illegible] generic [illegible] superhuman [illegible] AlphaGo Zero [illegible]

AlphaGo Zero [illegible] AlphaGo Zero [illegible]

[illegible] AlphaGo Zero [illegible] AlphaGo Zero [illegible] AlphaGo Zero [illegible]

[illegible] AlphaGo Zero [illegible] 4 [illegible] [10] [illegible]

[illegible]

[illegible]

[illegible]

[illegible] AlphaGo Zero [illegible]

[illegible]

[illegible] AlphaGo [illegible] AlphaGo [illegible] [11] [illegible]

[illegible] Turing Machine [illegible] AlphaGo [illegible] AlphaGo Zero [illegible] AlphaGo Master [illegible] AlphaGo Zero [illegible] AlphaGo Zero [illegible] [12] [illegible]

[illegible] AlphaGo Zero [illegible] Deep Blue [illegible] AlphaGo Zero [illegible] Deep Blue [illegible] Demis Hassabis [illegible] [13] [illegible] AlphaGo Zero [illegible] superhuman [illegible]

[illegible] Deepmind [illegible] [14] [illegible]

[illegible]

[illegible]

[illegible]:“Go gaming is strictly defined within a very small space. Industrial automations are typically designed in well controlled environments, but not strictly defined. Car driving is regulated, but the environment is not well controlled”[illegible]

[illegible] AlphaGo Zero [illegible]

[illegible] SAE level 5 [illegible] SAE level 4 [illegible] SAE level 4 [illegible] SAE level 4 [illegible]

[illegible] 19X19 [illegible] AlphaGo Zero [illegible]

[illegible] address [illegible] 737Max [illegible] adversarial testing autoML specification

Deepmind Waymo AlphaGo Zero

70% 10%

“ ”

[illegible]

[illegible] [15][illegible]

[illegible]

[illegible]

[illegible] Turing Machine [illegible] Universal approximation theorem [illegible]

[illegible] Technological Singularity[illegible]

[illegible]

[illegible]

1949 [illegible] leukotomy [illegible]

Turing Test [illegible] AI[illegible]A Modern Approach [illegible] Wind Tunnel approach [illegible] Nature [illegible] AlphaGo Zero [illegible] superhuman [illegible]Technological Singularity[illegible]In Math We Trust[illegible]“[illegible]”[illegible] [16][illegible] [17][illegible]

[illegible]

[illegible] [18][illegible]

[illegible]Occam's Razor[illegible]

Occam's Razor [illegible] Occam's Razor [illegible]

[illegible] Occam's Razor [illegible] Leukotomy [illegible]

[illegible]

[illegible]

[illegible] Gu Test[illegible]A Progressive Measurement Of Generic Artificial Intelligence [illegible]

[illegible]

[illegible]

[illegible]

[illegible] [19][illegible]

[illegible] [20][illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] commonsense[illegible]

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[illegible] [21]。

[illegible]·[illegible]

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[illegible]

[illegible]·[illegible]

[illegible]

[illegible]

[illegible] [22][illegible] [23]。

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[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Chinese room [illegible]

[illegible]

[illegible] dataset [illegible] SQuAD[illegible]CoQA[illegible]QuAC[illegible] GLUE [illegible] dataset [illegible]Chinese room [illegible]

NLVR^2[illegible]Natural Language for Visual Reasoning for Real[illegible] testset [illegible]GLUE [illegible] generic [illegible]

[illegible] Testsets [illegible]AI: A Modern Approach[illegible]

[illegible] guideline [illegible] judgement[illegible]

[illegible] Chinese room [illegible]

[illegible]

The Third Wave [illegible]

[illegible] AlphaGo [illegible] self-driving car [illegible]

The Third Wave [illegible]

[illegible]

[illegible] Total Quality Management [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Leukotomy [illegible]AI: A Modern Approach[illegible]

[illegible]

[illegible]“[illegible]”[illegible] [24][illegible]

[illegible] AI [illegible]

[illegible] AlphaGo Zero[illegible] AI: A Modern Approach [illegible]

[illegible] AI: A Modern Approach [illegible]AI [illegible] AI [illegible]

[illegible]

[illegible]

[illegible]

[illegible] Chinese room [illegible]

[illegible] judgement [illegible]

[illegible]

[illegible]

[illegible] [25] [illegible]

[illegible]

[illegible]

[illegible]

1989 [illegible] “[illegible]” [illegible]

[illegible] AlphaGo [illegible] [26] [illegible] Socratic [illegible]

[illegible] 2015 [illegible] Bohunt Chinese School [illegible] BBC [illegible] Are Our Kids Tough Enough ? [illegible]

[illegible] 2012 [illegible] PISA [illegible] 2015 [illegible] 2018 [illegible] PISA [illegible]

[illegible] Bohunt Chinese School [illegible] Bohunt [illegible] [27] [illegible]

[illegible] PISA [illegible]

Bohunt [illegible] Confucianism [illegible]

[illegible]

[illegible] Bohunt [illegible]

[illegible]

[illegible]

[illegible] discipline [illegible] competition[illegible]

Discipline [illegible] Bohunt [illegible] Socratic [illegible]

[illegible] competition[illegible]

[illegible]“[illegible]”[illegible] 2012 [illegible]

[illegible]

[illegible] [28][illegible]

[illegible] [29][illegible]Leukotomy [illegible]

[illegible] Technological Singularity [illegible] AI: A Modern Approach [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]——[illegible]“[illegible]”[illegible][30][illegible]

[illegible]

[illegible]

[illegible] Technological Singularity [illegible]

[illegible]

[illegible]

[illegible] Karl Popper [illegible]

[illegible]

[illegible]

BRAIN Initiative [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] The Development of Liberal Arts and Sciences [illegible]

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[1] [illegible] AI: A Modern Approach [illegible]“Aristotle... was the first to formulate a precise set of laws governing the rational part of the mind.”(On page 5)[illegible]

[illegible] Wind Tunnel approach [illegible]

[illegible]

[2] [illegible]

[illegible] Technological Singularity[illegible]AlphaGo Zero [illegible] superhuman [illegible]In Math We Trust [16][illegible]“[illegible]”[illegible]

[illegible]

[illegible]

[illegible]

[illegible]“Read my lips: no new taxes”[illegible]

[illegible]

[illegible]

[illegible] Whiz Kids [illegible] Pentagon Papers [illegible]MBA [illegible]

[illegible]

[3] [illegible]: [illegible] metaphysics [illegible]

[4] [illegible]

O.J.Simpson [illegible]

[illegible] [20][illegible]O.J.Simpson [illegible]O.J.Simpson [illegible]
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[5] [illegible]

[illegible]

[illegible]

[6] [illegible]

[illegible]

[7] [illegible] Leucotomy in England and Wales, 1942-1954[illegible] 9284 [illegible]41[illegible]28[illegible]25[illegible]2[illegible]4[illegible]

[illegible] personality [illegible] intelligence[illegible] 25[illegible] personality [illegible] intelligence [illegible] clinical condition [illegible]41[illegible] 28[illegible] clinical condition [illegible]personality [illegible] intelligence [illegible]

[illegible]leucotomy [illegible]

[illegible] Renato M.E. Sabbatini [illegible]Even lobotomy's preponents admitted that only one third of the operated patients would improve, while one-third remained the same, and one-third got worst [illegible] Leucotomy in England and Wales, 1942-1954 [illegible]http://www.cerebromente.org.br/n02/historia/lobotomy.htm[illegible]

[illegible] one third would improve [illegible] one-third remained the same[illegible] clinical condition[illegible] personality [illegible] intelligence [illegible]

[8] SyNAPSE [illegible] ACM Gordon Bell prize[illegible]Dharmendra Modha [illegible] thank you note[illegible]

Henry Markram [illegible] SyNAPSE [illegible] annoucement [illegible] mass deception of the public[illegible] SyNAPSE [illegible]Henry Markram [illegible]"It is not impossible to build a human brain and we can do it in 10 years."[illegible] Human Brain project[illegible]

[illegible] NIH Director [illegible] moonshot [illegible] BRAIN Initative [illegible] dynamic brain activity map [illegible] neurosciences [illegible]

[illegible] moonshot [illegible] moonshot [illegible]

[illegible] NIH Director [illegible]

[illegible]

[9] [illegible]

[illegible] peer review[illegible] peer review[illegible]

[illegible]AlphaGo Zero [illegible] superhuman [illegible] generic [illegible] human[illegible] AlphaGo Zero [illegible]

[10] [illegible]

[illegible]

[illegible] AlphaGo [illegible] Google [illegible] AlphaGo [illegible]AlphaGo Zero[illegible] AlphaGo [illegible]Human level artificial intelligence [illegible] AlphaGo [illegible]

[illegible]

[11] [illegible]

[illegible] Demis Hassabis [illegible] AlphaGo Zero [illegible] AlphaGo Zero [illegible] Deepmind [illegible]

[illegible] Deepmind [illegible] ethics board [illegible]Deepmind [illegible]Google [illegible] AlphaGo [illegible]

[12] [illegible] AlphaGo Zero [illegible] AlphaGo Master [illegible] AlphaGo Zero [illegible]AlphaGo Master [illegible] 16 [illegible] AlphaGo Zero [illegible] 18 [illegible]AlphaGo Zero [illegible] 14[illegible]16 [illegible] 45 [illegible]

1[illegible] Nature Magazime [illegible] AlphaGo [illegible]Deepmind [illegible] AlphaGo Zero [illegible] AlphaGo Master [illegible]

2) [illegible] AlphaGo Zero [illegible] local trap[illegible]

[13] [illegible] The Guadian [illegible] a meta-solution to any problem[illegible]

"Demis Hassabis ... is deadly serious when he tells me he is on a mission to 'solve intelligence, and then use that to solve everything else'.

……

'One way of thinking of AGI is as a process that will automatically convert unstructured information into actionable knowledge. What we're working on is potentially a meta-solution to any problem.'",

from https://www.theguardian.com/technology/2016/feb/16/demis-hassabis-artificial-intelligence-deepmind-alphago[illegible]

[14] [illegible] Cracking Go [illegible] Deep Blue [illegible]AlphaGo [illegible] AlphaGo [illegible]

[15] [illegible]Universal approximation theorem [illegible] Turing Machine [illegible]

[16] [illegible]

In God We Trust [illegible] God [illegible] Trust[illegible]

[illegible]In Math We Trust [illegible]In Math We Trust [illegible]

[17] [illegible]

[18] [illegible]

[19] [illegible]

[20] [illegible]

[illegible]

[illegible]

[21] [illegible] 1819 [illegible] Ferdinand Schweikart [illegible]

[illegible] 1830 [illegible]

[illegible]Ferdinand Schweikart [illegible]

[22] [illegible]·[illegible]“[illegible]”

[illegible]

[23] [illegible]

[illegible]

[illegible]

[illegible]

[illegible] wikipedia [illegible]

[illegible]

[illegible] emergent phenomena [illegible]

[24] [illegible]

[illegible]

[illegible]“[illegible]”[illegible]

[25] [illegible]

[illegible] mainframe[illegible] personal computer[illegible] smartphone[illegible] smartphone [illegible]

[illegible] IT [illegible]

[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible] 100 [illegible] 100 [illegible] 60 [illegible]

[illegible]

[illegible]

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[26] [illegible]“[illegible]”[illegible]

[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

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[illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible]“[illegible]”[illegible]

[27] “[illegible]·[illegible] BBC [illegible]”[illegible]http://shanghai.xinmin.cn/xmsq/2016/04/18/29861595.html[illegible]

[illegible]

[28] [illegible]“[illegible]”[illegible]·[illegible]“[illegible]”[illegible]

[illegible]“[illegible]”[illegible]

[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[29] [illegible]

[illegible]

[30] [illegible] Nature [illegible] AlphaGo Zero [illegible] superhuman [illegible] 60 [illegible]

[illegible]

[illegible] The selfish Gene [illegible]